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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,310

07/02/2003

Louis Robert Litwin

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Thomson Licensing LLC

P.O. Box 5312

Two Independence Way

PRINCETON, NJ 08543-5312

EXAMINER

PUENTE, EVA Y1

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/612,310	Applicant(s) LITWIN ET AL.	
	Examiner EVA Y. PUENTE	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-17, 19 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 3-7, 18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. The request filed on April 9, 2009, for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/612,310 is acceptable and a RCE has been established. An action on the RCE follows.

Claim Objections

2. Claims 8 and 9 are objected to because of the following informalities: on line 1-2, please delete "wherein the apparatus" and add -- further --.
3. Claims 18 and 20 are objected to because of the following informalities: on line 1, please change "the" to -- a -- before "complex".
Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawahashi et al. (5,774,494) in view of Demir (US 2005/0163266).
 - a) Regarding claim 1, Sawahashi disclose a block (figure 2) comprising:

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a first correlation arrangement that correlates for a primary synchronization code in a received signal to produce a first correlated signal (correlation detection elements 48 and 49, which generate output S_{15} ; col.5, L 63- Col 6, L 29);

a second correlation arrangement that correlates for a secondary synchronization code (the primary synchronization code and secondary synchronization code does not have to be different. Clock signals with difference delays (block 47) are used to despread a spread code in block 17, 48, and 49, respectively) in the received signal to produce a second correlated signal (correlation detection element 17, which generate output S_{3I} , S_{3Q} ; col.5, L 8-11); and

logic that derives a frequency adjustment signal from the first correlated signal (blocks 58 and 59) and combines the frequency adjustment signal with the second correlated signal to reduce a frequency offset in the second correlated signal (frequency adjustment signals S_{4I} , S_{4Q} are combined with S_{3I} , S_{3Q} at mixer 25 to produce frequency error corrected output; Col 6, L50-59) such that a secondary synchronization channel of a cell is acquired (synchronization and frequency error correction on a secondary synchronization channel (elements 17, 25, and 22) is acquired; Col 5, L1-7).

Sawahashi et al. disclose an automatic frequency control (AFC) in a spread-spectrum receiver system. Sawahashi et al. does not explicitly disclose a cell search block. However, Demir discloses that an AFC is used to reduce the frequency offset between a base station and user equipment during a cell search procedure ([0011], L1-4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to combine the cell search of Demir with the AFC of Sawahashi et

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al. Thus, recognize that the AFC of Sawahashi et al is a cell search block. One of ordinary skill in the art would be motivated to do so to achieve optimum frequency offset control between a base and user station.

b) Regarding claim 2, Sawahashi discloses a frequency adjustment block that receives the first correlated signal and produces the frequency adjustment signal (58 and 59 in Fig. 2).

c) Regarding claim 8, Sawahashi discloses a communication receiver comprises a portion of a code division multiple access receiver (Col 1, L1-13).

d) Regarding claim 9, Sawahashi discloses a CDMA receiver. Sawahashi does not explicitly disclose the receiver complies with UMTS WCDMA standard. However, UMTS is a well known third-generation mobile telecommunication technology. The most common form of UMTS uses WCDMA. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to operate the AFC of Sawahashi in UMTS WCDMA standard. One of ordinary skill in the art would be motivated to do so to facilitate high speed wireless communications.

Allowable Subject Matter

5. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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6. Claims 18 and 20 would be allowable if rewritten to overcome the objections, set forth in this Office action.
7. Claims 10-17 and 19 are allowed.
8. The following is an examiner's statement of reasons for allowance: None of the prior art teaches or suggest a CDMA receiver comprises an A/D converter for receive and convert analog signal to digital, a matched filter that filters the digital signal, a tapped delay line for delay the filtered signal, and a cell search block, which correlate the delayed filter signal with a primary and secondary synchronization code, wherein the primary and secondary synchronization code are being different.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Y Puente whose telephone number is 571-272-3049. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 5, 2009

/EVA Y PUENTE/
Examiner, Art Unit 2611